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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
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EXAMINER

HASSAN, AURANGZEB

ART UNIT	PAPER NUMBER
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2182

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/4/10 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Examiner has provided a summary in order to better follow the rejection.

Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter “Thomas”) in view of Boggs et al (US Publication Number 2001/0037491 hereinafter “Boggs”) further in view of Evans et al. (US Patent Number 6,307,880, hereinafter “Evans”) further in view of Hutchison, IV et al. (US Publication Number 2001/0034246, hereinafter “Hutchison”).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.

Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319)

Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).

(Emphasis has been added to claim limitations that recite terminology that require the ability to carry out a certain function, however the claim limitations do not necessitate that the function be completed, *i.e.* the

Art Unit: 2182

terms **couplable** and **connectable** do not necessitate a coupling or connection but merely recite the ability to be coupled or connected.)

4. Claims 1 – 9, 11, 12, 14 – 22 and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (US Patent Number 5,649,001 hereinafter “Thomas”) in view of Boggs et al (US Publication Number 2001/0037491 hereinafter “Boggs”) further in view of Evans, III (US Patent Number 6,307,880 , hereinafter “Evans”) further in view of Hutchison, IV et al. (US Publication Number 2001/0034246, hereinafter “Hutchison”).

5. As per claim 1, Thomas teaches a system comprising: a cellular telephone modem (cellular phone system, column 3, lines 8 – 15); and a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a computer (communication interface device, element 20, figure 1) and a second end **connectable** to said cellular telephone modem (communication network/device, element 28, figure 1, cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters comprising a PIN number (identification code, column 6, lines 15 – 20) a memory of said programmable cable distinct from said PLC (32, figure 1, column 9, lines 34 – 41); said programmable cable adapted to, in an operative embodiment, automatically configure said cellular telephone modem by communicating at least one of the configuration parameters to said cellular telephone modem (column 6, lines 15 – 25 and lines 38 – 46).

Thomas fails to specify the type of computer as being a PLC and a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to one of ordinary skill in the art to combine the above teachings with Boggs. One of ordinary skill in the art would be motivated to make such modifications in order to provide higher performance in communications (paragraph [0027]).

Thomas teaches a cable with a memory means to store a plurality of operating values which correspond to operating characteristics of the given communication network (column 9, lines 34 – 41). Boggs teaches operational parameters to communicate a mode switch (paragraphs [0263 – 0268] describe switching between the two modes).

All of the component parts of Thomas and Boggs were known at the time of the applicant's claimed invention the only difference is the combination if the known elements in a single adapter cable thus it would have been obvious to one of ordinary skill in the art to combine all the elements in a single memory adapter cable to yield a predictable result of allowing communication between connectable devices.

The combination of Thomas and Boggs does not teach a PIN number associated with enabling the cellular telephone modem.

Evans teaches a PIN number utilized in the identification of a cellular device that allows for enabling the device to function therein (92, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the PIN number of Thomas/Boggs in order to allow for verification in enabling the cellular telephone modem as seen in the above teachings of Evans. One of ordinary skill would be motivated to make such modification in order to enhance connectivity of the cellular device (column 3, lines 16 – 27).

The combination of Thomas/Boggs/Evans does not teach a modem comprising a subscriber identity module (SIM).

Hutchison teaches a telephone modem comprising a subscriber identity module (SIM) utilize in activating service (122, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the combination of Thomas/Boggs/Evans with the above teachings of Hutchison. One of ordinary skill would be motivated to make such modification in order to enhance the interfacing of a wireless communication device (paragraphs 5 – 7).

The examiner notes that the applicant in the specification background, paragraph 2, lines 1 and 2, states that a PLC is a type of **computer** (emphasis added) utilized in control systems.

6. As per claim 2, Thomas teaches a device comprising: a programmable cable (communication adapter cable, element 22, figure 1) comprising a first end **connectable** to a PLC (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters; in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of a plurality of configuration parameters to the network communications device comprising a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (PLC attached to cable, paragraph [0331]) **connectable** to a programmable logic controller (PLC) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The combination of Thomas and Boggs does not teach a PIN number associated with enabling the cellular telephone modem.

Evans teaches a PIN number utilized in the identification of a cellular device that allows for enabling the device to function therein (92, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the PIN number of Thomas/Boggs in order to allow for verification in enabling the cellular telephone modem as seen in the above teachings of Evans. One of ordinary skill would be motivated to make such modification in order to enhance connectivity of the cellular device (column 3, lines 16 – 27).

The combination of Thomas/Boggs/Evans does not teach a modem comprising a subscriber identity module (SIM).

Hutchison teaches a telephone modem comprising a subscriber identity module (SIM) utilized in activating service (122, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the combination of Thomas/Boggs/Evans with the above teachings of Hutchison. One of ordinary skill would be motivated to make such modification in order to enhance the interfacing of a wireless communication device (paragraphs 5 – 7).

7. As per claims 9, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device,

element 28, figure 1); the network communications device further **couplable** to a user interface device (cellular phone system, column 3, lines 8 – 15); and said programmable cable programmable to store at least one of a plurality of configuration parameters comprising: a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59, emphasis added).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The combination of Thomas and Boggs does not teach a PIN number associated with enabling the cellular telephone modem.

Evans teaches a PIN number utilized in the identification of a cellular device that allows for enabling the device to function therein (92, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the PIN number of Thomas/Boggs in order to allow for verification in enabling the cellular telephone modem as seen in the above teachings of

Evans. One of ordinary skill would be motivated to make such modification in order to enhance connectivity of the cellular device (column 3, lines 16 – 27).

The combination of Thomas/Boggs/Evans does not teach a modem comprising a subscriber identity module (SIM).

Hutchison teaches a telephone modem comprising a subscriber identity module (SIM) utilized in activating service (122, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the combination of Thomas/Boggs/Evans with the above teachings of Hutchison. One of ordinary skill would be motivated to make such modification in order to enhance the interfacing of a wireless communication device (paragraphs 5 – 7).

The Examiner asserts that the claim limitations only require the capability to communicate to the PLC but do not necessitate such limitations. Accordingly the programmable cable of Thomas communicates with a computer and network.

8. As per claim 14, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end and a second end, the first end **connectable** to a PLC (communication interface device, element 20, figure 1), the second end **connectable** to a cellular telephone modem (communication network/device, element 28, figure 1), a user interface device **couplable** to a network comprising the programmable cable, the PLC, and the cellular telephone modem

(cellular phone system, column 3, lines 8 – 15); said programmable cable adapted to store at least one of a plurality of configuration parameters (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59); and automatically configuring the cellular telephone modem by the programmable cable (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The combination of Thomas and Boggs does not teach a PIN number associated with enabling the cellular telephone modem.

Evans teaches a PIN number utilized in the identification of a cellular device that allows for enabling the device to function therein (92, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the PIN number of Thomas/Boggs in order to allow for verification in enabling the cellular telephone modem as seen in the above teachings of Evans. One of ordinary skill would be motivated to make such modification in order to enhance connectivity of the cellular device (column 3, lines 16 – 27).

The combination of Thomas/Boggs/Evans does not teach a modem comprising a subscriber identity module (SIM).

Hutchison teaches a telephone modem comprising a subscriber identity module (SIM) utilized in activating service (122, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the combination of Thomas/Boggs/Evans with the above teachings of Hutchison. One of ordinary skill would be motivated to make such modification in order to enhance the interfacing of a wireless communication device (paragraphs 5 – 7).

9. As per claim 26, Thomas teaches a method comprising the activities of: providing a programmable cable comprising a first end **connectable** to a network (communication interface device, element 20, figure 1) and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1), a user interface device **couplable** to a network (cellular phone system, column 3, lines 8 – 15); and automatically communicating from the programmable cable to the network communicating device a PIN number and at least one of a plurality of configuration parameters (handshaking and connectivity via communication interface device upon automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

Thomas does not disclose a Freeport mode and PPI mode.

Boggs teaches the plurality of configuration parameters comprising a mode switch parameter adapted to cause a mode switch of said programmable cable (cable, paragraph [0331]) to select between a Freeport mode and a PPI mode (paragraphs [0263 – 0268] describe switching between the two modes).

It would have been obvious to combine Thomas and Boggs for the same reason discussed in claim 1.

The combination of Thomas and Boggs does not teach a PIN number associated with enabling the cellular telephone modem.

Evans teaches a PIN number utilized in the identification of a cellular device that allows for enabling the device to function therein (92, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the PIN number of Thomas/Boggs in order to allow for verification in enabling the cellular telephone modem as seen in the above teachings of Evans. One of ordinary skill would be motivated to make such modification in order to enhance connectivity of the cellular device (column 3, lines 16 – 27).

The combination of Thomas/Boggs/Evans does not teach a modem comprising a subscriber identity module (SIM).

Hutchison teaches a telephone modem comprising a subscriber identity module (SIM) utilized in activating service (122, figure 1).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the combination of Thomas/Boggs/Evans with the above teachings of Hutchison. One of ordinary skill would be motivated to make such

Art Unit: 2182

modification in order to enhance the interfacing of a wireless communication device (paragraphs 5 – 7).

The Examiner elaborates that Thomas teaches a programmable cable **couplable** to a network. Thomas teaches a general network and as the claim limitations stand in claim 26, the term **couplable** does not necessitate all the proceeding elements but rather puts forth a capability to be coupled to such a network. As claim 26 is a method the claim limitation **couplable** does not necessitate the particular network comprising particular network elements but rather necessitates the capability of coupling to a network in general which is Thomas' cellular phone system.

10. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claims 3, 4, 6 – 8, Thomas teaches a device wherein the network interface device comprises a multitude of end interfaces (cellular phone system: column 3, lines 8 – 15; telephone network: column 1, lines 65 – 67, column 2 lines 1 – 2; network and Internet: column 8, lines 42 – 59; cellular phone system: column 3, lines 8 – 15).

11. Thomas modified by the teachings of Boggs as applied in claim 2 above as per claim 5, Thomas teaches a device wherein the configuration parameters further comprise a setup string for the network interface device (column 8, lines 45 – 58).

Art Unit: 2182

12. As per claim 11, Thomas teaches a device wherein in an operative embodiment, said programmable cable adapted to automatically configure the network communications device by communicating at least one of the plurality of configuration parameters to the network communications device (column 8, lines 45 – 58).

13. As per claim 12, Thomas teaches a device wherein said second end of said programmable cable comprises an RS232 network connector (communication over an RS232 serial port, column 1, lines 31 – 37).

14. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 15 and 16, Thomas teaches a method wherein said automatically configuring activity occurs during/after a power-cycling of the programmable cable (power-cycling through connection and interchanging of adapter cables and automatically configuring through periodic polling, column 4, lines 17 – 63).

15. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 17, Thomas teaches a method comprising automatically communicating, from the programmable cable to the network communications device at least one of the plurality of configuration parameters (column 8, lines 42 – 59).

16. As per claims 18 and 27, Thomas teaches a method comprising: via the user interface device through the network, setting at least one of the plurality of

Art Unit: 2182

programmable cable configuration parameters comprising a communication language (adapt the modem to a particular country's telephone network, column 1, lines 63 – 67, column 3, lines 1 – 2) and an identifying PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

Boggs teaches said programmable cable programmable to store **at least one** of a plurality of configuration parameters comprising: a mode of operation, a PPI protocol, and a data transfer speed (PPI, mode, and baud rates, paragraph [0251]).

(Emphasis added)

17. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claims 19 – 21, Thomas teaches a method further comprising initializing the programmable cable using the user interface device through the network by setting at least one of the plurality of configuration parameters comprising a network communications device setup string and a PIN number (communication adapter cable identification code stored on communication adapter cable, column 10, lines 47 – 59).

18. Thomas modified by the teachings of Boggs as applied in claim 14 above as per claim 22, Thomas teaches a method wherein said activity of automatically configuring the cellular telephone modem by the programmable cable further comprises communicating at least one of a plurality of configuration parameters, comprising cellular telephone modem setup string and a PIN number, to the cellular telephone modem (handshaking and connectivity via communication interface device upon

automatic verification of the identification code, column 6, lines 15 – 48, communication adapter cable identification code stored on communication adapter cable in use for cellular telephone network, column 10, lines 47 – 59).

19. As per claim 28, Thomas teaches a method wherein the configuration parameters communicated to the network communications device further comprise a network communications device setup string (column 8, lines 45 – 58).

20. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Cisco Systems.

21. Thomas modified by the teachings of Boggs and Cisco as applied to claim 9 above, as per claim 10, Thomas teaches a device comprising: a programmable cable comprising, a first end **connectable** to a network (**couplable** to a PLC), and a second end **connectable** to a network communications device (communication network/device, element 28, figure 1, emphasis added)

Thomas in view of Boggs does not explicitly teach token holding.

Cisco teaches a device wherein said programmable cable further adapted to, in an operative configuration, serve as a token holding master on the network adapted to multiplex networked communications with the PLC (each station holding token, Section: Token Ring Operation).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Cisco Systems. One of ordinary skill in the art would have been motivated to make such modification in order to allow reduce collisions of data on network (Section: Review Questions).

22. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Rostoker et al. (US Patent Number 6,978,319).

23. As per claim 13, Thomas teaches a device wherein said second end of said programmable cable comprises a connector (can be utilized with wide variety of communication protocols and a variety of networks, column 3, lines 47 – 54).

Thomas fails to teach a connector that which comprises a USB network connector.

Rostoker et al. analogously teaches a device wherein said second end of said programmable cable comprises a connector comprising a USB network connector (column 5, lines 4 – 11).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Rostoker et al. One of ordinary skill in the art would have been motivated

to make such modification in order to allow for “plug-and-play” further allowing transparency on the user end (column 2, lines 63 – 67).

24. Thomas modified by Boggs further modified by the teachings of Rostoker et al. as applied to claim 13 above, as per claim 29, Rostoker et al. teaches a method further comprising monitoring data traffic through the programmable cable using a set of status indicators (status of data present through protocols where the controller notes indication, figure 8).

25. Claims 23 – 25 and 30 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Boggs further in view of Al-Ali (US Publication Number 2003/0167391).

26. As per claims 23 – 25 and 30 – 32, the combination of Thomas and Boggs teaches a method further comprising communications between the user interface device and the PLC (Thomas: computer, column 3, lines 47 – 54; Boggs: PLC paragraph [0331]), between the programmable cable and the PLC and between the programmable cable and the user interface device (Thomas: figure 1).

The combination of Thomas and Boggs fails to explicitly teach the limitation of encryption along the communication lines lying therein between.

Al-Ali teaches analogously a method comprising encryption along a cable communicating between interfaces (encryption interface cable, element 700, figure 6).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Thomas and Boggs with the above teachings of Al-Ali. One of ordinary skill in the art would have been motivated to make such modification in order to allow for exclusive compatibility between interfaces without the necessity of hardware modifications (paragraph [0027]).

Response to Arguments

27. Applicant's arguments with respect to claims 1 -32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AURANGZEB HASSAN whose telephone number is (571)272-8625. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

/Ilwoo Park/
Primary Examiner, Art Unit 2182
3/15/2010